

Page 3, line 7, strike "interconnection" and insert therefor --interconnection--.

Page 3, line 16, after "spa control system", insert the following paragraph:

--FIGURE 14 illustrates diagrammatically a system constructed in accordance with the preferred embodiment--.

Page 3, line 21, strike "(not shown)".

Page 3, line 27, strike "Figure 1" and insert therefor --Figures 1 and 14--.

Page 3, line 29, strike "interconnection" at its first occurrence and insert therefor --interconnection--.

Page 3, line 29, strike "innerconnection" at its second occurrence and insert therefor --interconnection--.

Page 3, line 31, strike "at".

Page 3, line 31, strike "a" and insert therefor --as--.

Page 3, line 31, after "20," insert --21,--.

Page 3, line 31, after "pH", insert --22--.

Page 3, line 32, delete "22".

Page 4, line 2, strike "(not shown)" inset therefor --29--.

Page 4, line 15, strike "current image" insert therefor --calibration values--.

Page 4, line 29, after "conditioning" insert --at--.

Page 4, line 31, between "temperature" and the comma, insert --21--.

Page 4, line 32, strike "(both labelled 20)" and insert therefor --20--.

Page 6, line 8, after "block" insert --38--.

Page 6, line 18, after "1", insert --, 2--.

Page 6, line 18, strike "6" and insert therefor --5--.

Page 6, line 22, strike the numeral "50" and insert therefor --48--.

Page 6, line 30, strike "blower" and insert therefor --pump--.

Page 6, line 30, strike "pump" and insert therefor --blower--.

Page 6, line 31, after "isolated" insert --at--.

Page 7, line 1, strike "innerconnection" and insert therefor --interconnection--.

Page 7, line 3, strike "innerconnection" and insert therefor --interconnection--.

Page 7, line 5, strike "innerconnection" and insert therefor --interconnection--.

Page 7, line 7, after "Interlock" insert --63--.

Page 7, line 9, after "device" insert --64--.

Page 8, line 2, after "20," insert --21,--.

Page 8, line 8, after "20," insert --21,--.

Page 8, line 11, strike "small" and insert therefor --low--.

Page 8, line 11, after "20," insert --21,--.

Page 8, line 30, strike "46" and insert therefor --40--.

Page 8, line 32, strike "46" and insert therefor --40--.

Page 9, line 18, after "20" insert --, 21--.

Page 9, line 18, strike "26" and insert therefor --29--.

Page 9, line 20, between "20" and "of" insert --, 21--.

Page 9, line 22, after "20" insert --, 21--.

Page 9, line 27, strike “*”.

Page 10, line 3, strike “5” and insert --6--.

Page 10, line 23, strike “It” and inset therefor --If--.

Page 12, line 2, after “program” insert --104--.

Page 12, line 22, strike “keypad” and insert therefor --keyboard--.

Page 12, line 24, strike “keypad” and insert therefor --keyboard--.

Page 12, line 31, after “LED” insert --52--.

Page 12, line 32, after “key” insert --50--.

Page 12, line 34, after “screen” insert --46--.

Page 13, line 2, after “display” insert --40--.

Page 15, line 16, after “temperature” insert --21--.

Page 15, line 19, after “temperature” insert --20--.

Page 20, line 3, strike “CTLACT - Routine”.

Page 20, line 15, strike “CTLERR - routine” at its first occurrence.

Page 20, line 20, strike “CTLKEY - Routine”.

Page 20, line 26, strike “The Module CTLLLEDs - Routine CTLLLEDs - “.

Page 20, line 26, strike “if” and insert --If--.

Page 20, line 27, strike “CTLLLEDs”.

Page 20, line 27, strike “when” and insert --while--.

Page 21, line 1, strike “Delay - Routine” at its first occurrence.

Page 21, line 3, strike “DELTIME - Routines”.

Page 24, line 3, strike "Learn - Routine" at its first occurrence.

Page 24, line 29, strike "MYREGS - Routine".

Page 25, line 3, strike "give".

Page 25, line 9, strike "POWRFAIL - Routine".

Page 25, line 22, strike "ROMTEST - Routine".

Page 25, line 23, after "program" insert "--EPROM or other--".

Page 26, line 9, strike "hysteris" and insert therefor "--hysteresis--".

Page 26, line 30, strike "Routine".

Page 27, line 11, strike "TIMEBIN - Routine".

Page 27, line 13, between "Routine" and "is" strike "Timer".

Page 27, line 18, strike "UNMIL Routine".

Page 27, line 20, strike "an/pm" and insert therefor "--am/pm--".

Page 27, after line 35, add the following paragraphs:

--Figure 14 shows one possible configuration of the system of the present invention based on the above description. A spa, in accordance with normal convention, includes a container 11 for holding water 13 for bathers. The control panel 12 may be at spa side. As has been previously described, various output devices are installed in the system for the user of the system. As is well known in the art, conventional output devices include a heater 26, an air blower 28, a filter 27, lights 30, and a pump 24. Pump 24 may be separate pumps or one pump with a high and low speed. Heater 26 includes a heating element or heater core 29 for heating the water. Plumbing is provided with the system such as a plurality of pipes 35 for flowing water to and

from the container 11. The low speed of pump 24 pumps water through pipes 35 causing the water to pass through filter 27 and heater 26 prior to flowing into container 11. The high speed of pump 24 flows water at high speeds through jet 37 mounted on container 11. The turbo or air blower 28 blows air into the water 13.

Various input devices are installed at selected locations within the system of the present invention and include sensors for detecting various parameters of the water and the system. Such sensors include the flow rate sensor 18, the temperature sensor 20 measuring the temperature of the water at the heating element 29, the temperature sensor 21 measuring the temperature of the water in the container 11, and a pH probe 22 measuring the pH of the water in the container 11. As has been previously described, the input devices are connected to a system interconnection panel 14 which is connected to the control panel 12 and microprocessor 10 for receiving output signals from the various input devices. The system interconnection panel 14 is also connected to the various output devices for sending input signals to the various output devices.--

Page 28, lines 14 and 15, strike "49" and insert therefor --24--.

Page 28, line 17, after "element" strike "(in 220v, in" and insert --in 220v (in--.

Page 28, line 27, strike "59," and insert therefor --65--.

Page 28, line 28, strike "50" and insert therefor --61--.

Page 28, line 28, after "heating" insert --59--.

Page 28, line 28, strike "61" and insert therefor --67--.

Page 28, line 30, strike "46" and insert therefor --40--.

Page 29, line 1, after "thermostat" insert --43--.

Page 29, line 7, strike "46" and insert therefor --40--.

Page 29, line 11, strike "Figure" and insert --Figures 4 and--.

Page 29, line 12, after "reset" insert --at--.

Page 29, line 14, strike "100" and insert therefor --104--.

Page 29, line 16, strike "100" and insert therefor --110--.

Page 29, line 19, after "scanner" insert --82--.

Page 29, line 20, strike "32".

Page 29, line 20, strike "7" and insert therefor --2--.

Page 30, line 10, strike "50" and insert therefor --61--.

Page 30, line 10, strike "50".

Page 30, line 11, strike "46" and insert therefor --40--.

Page 30, line 13, strike "50" and insert therefor --61--.

Page 30, line 16, strike "50" and insert therefor --61--.

Page 30, line 19, strike "50" and insert therefor --61--.

Page 30, line 21, strike "50" and insert therefor --61--.

Page 30, line 23, strike "46" and insert therefor --40--.

Page 31, line 5, strike "46" and insert therefore --40--.

Page 31, line 17, after "switch" insert --31--.

Page 31, line 18, strike "innerconnection" and insert therefor --interconnection--.

Page 31, line 18, strike "54 in" and insert therefor --48 and--.

Page 31, line 19, after "display" insert --40--.